AMENDMENTS TO THE CLAIMS

Claims 1-15 (canceled).

16. (currently amended): A method for obtaining transgenic plants, comprising

(a1) transforming dicotyledonous plant cells or dicotyledonous plant explants with *Agrobacterium rhizogenes* containing two vectors: a vector (i) carrying a T-DNA comprising a ~~gene~~ DNA sequence encoding an H_2O_2 producing protein, and a vector (ii) being the pRi of *Agrobacterium rhizogenes,* in order to obtain transformants, wherein said ~~gene~~ DNA sequence encoding an H_2O_2 producing protein is flanked by elements necessary for expression of said ~~gene~~ DNA sequence; and wherein said transformation with *Agrobacterium rhizogenes* induces the formation of roots on the transformants;

or

(a2) transforming dicotyledonous plant cells or dicotyledonous plant explants with *Agrobacterium rhizogenes* containing two vectors: a vector (i) containing a recombinant DNA comprising both a ~~gene~~ DNA sequence encoding an H_2O_2 producing protein and a gene encoding a protein of interest, and a vector (ii) being the pRi of *Agrobacterium rhizogenes,* in order to obtain transformants, wherein said ~~gene~~ DNA sequence encoding the H_2O_2 producing protein and said gene encoding a protein of interest are flanked by elements necessary for expression of said genes; and wherein said transformation with *Agrobacterium rhizogenes* induces the formation of roots on the transformants;

and

(b) visually selecting the transformants which express said H_2O_2 producing protein by the use of a peroxidase-based colorimetric test, wherein said test is carried out on said transformants in the presence of a substrate for said protein with H_2O_2 producing activity and said peroxidase for revealing the formation of H_2O_2, and wherein said formation of H_2O_2 is revealed by coloration of said transformants, thus leading to selected transformants;

and

(c) regenerating transgenic-plantlets out of said selected transformants and monitoring the expression of said H_2O_2 producing protein within said plantlets obtained, wherein said expression is monitored by the use of a peroxidase-based colorimetric test wherein expression of said H_2O_2 producing protein is monitored by the presence of H_2O_2, revealed by a peroxidase-based colorimetric test;

and

(d) sorting the transgenic plantlets which do not contain said pRi of *Agrobacterium rhizogenes* and optionally carrying out a molecular analysis of the progeny of said sorted plantlets, allowing the selection or the confirmation of the obtainment of transgenic plantlets ~~only containing~~ containing only the ~~gene~~ DNA sequence encoding said H_2O_2 producing protein or the ~~gene~~ DNA sequence encoding said H_2O_2 producing protein and the gene encoding said protein of interest and not the pRi of Agrobacterium rhizogenes, wherein said transgenic plantlets containing the pRi of *Agrobacterium rhizogenes* exhibit phenotypic characteristics, such as crinkled leaves and shorter internodes, and transgenic plantlets which do not contain the pRi of *Agrobacterium rhizogenes*, do not exhibit said phenotypic characteristics;

and

(e) generating transgenic plants from said plantlets.

17. (currently amended): The method of claim 16, wherein the transformation according to step (a1) or (a2) induces the formation of roots on the dicotyledonous plant cells or dicotyledonous plant explants;

and wherein step

(b) comprises selecting the roots which express said H_2O_2 producing protein by the use of a peroxidase-based colorimetric test on said roots, wherein said test is carried out in the presence of a substrate for said protein with H_2O_2 producing activity and peroxidase for revealing the formation of H_2O_2, wherein said formation of H_2O_2 is revealed by coloration of said roots, thus leading to selected roots;

and

step (c) comprises regenerating transgenic plantlets out of the selected roots and monitoring the expression of said H_2O_2 producing protein within said plantlets

obtained, wherein said expression is monitored by the use of a peroxidase-based colorimetric test, wherein expression of said H_2O_2 producing protein is monitored by presence of H_2O_2, revealed by a peroxidase-based colorimetric test;

and

step (d) comprises sorting the transgenic plantlets which do not contain the pRi of *Agrobacterium rhizogenes* and optionally carrying out a molecular analysis of the progeny of said sorted plantlets, allowing the selection or the confirmation of the obtainment of transgenic plants ~~only containing~~ containing only the ~~gene~~ DNA sequence encoding said H_2O_2 producing protein or the ~~gene~~ DNA sequence encoding said H_2O_2 producing protein and the gene encoding said protein of interest and not the pRi of *Agrobacterium rhizogenes.*

18. (previously presented): The method according to claim 16, wherein said colorimetric test in step (b) is carried out on liquid incubation medium after decontamination of the transformed plant cells or plant explants, wherein said decontamination comprises eliminating agrobacteria from said liquid medium.

Claim 19 (canceled).

20. (previously presented): The method according to claim 16, wherein said selection in step (b) is carried out in the presence of a saturating concentration of said substrate for said H_2O_2 producing protein.

21. (original): The method according to claim 20, wherein the saturating concentration of substrate is from 5 to 50 mM.

22. (original): The method according to claim 16, wherein the colorimetric test in step (c) is carried out on a sample of plant tissue from the plantlets obtained.

23. (currently amended): The method according to claim 16, wherein said plant cells or plant explants are transformed with a vector comprising a recombinant DNA

comprising both a ~~gene~~ DNA sequence encoding an H_2O_2 producing protein and a gene encoding a protein of interest, and wherein ~~the~~ said gene encoding a protein of interest is a gene of interest which is expressed at a late stage of development of the plant.

24. (original): The method according to claim 16, wherein the plant cells are plant cells obtained from a member selected from the group consisting of rape, cauliflower, sunflower, tomato, and tobacco.

25. (previously presented): The method according to claim 16, wherein the plant cells are cells of the cotyledons, hypocotyls, petioles, or floral scapes.

26. (original): The method according to claim 16, wherein the plant cells do not endogenously produce oxalate oxidase.

27. (currently amended): The method according to claim 16, wherein said plant cells or plant explants are transformed with a vector comprising a recombinant DNA comprising both a ~~gene~~ DNA sequence encoding an H_2O_2 producing protein and a gene encoding a protein of interest, and wherein said protein of interest is an endochitinase.

Claims 28 and 29 (canceled).

30. (currently amended): The method of claim 16, wherein said plant cells or plant explants are transformed with a vector comprising a recombinant DNA comprising both a ~~gene~~ DNA sequence encoding an H_2O_2 producing protein and a gene encoding a protein of interest, and further comprising expressing and purifying said protein of interest.

31. (currently amended): The method of claim 16, wherein said elements necessary for the expression of said ~~gene~~ DNA sequence encoding an H_2O_2 producing protein and

said gene encoding a protein of interest comprise a promoter, wherein said promoter is selected from the group consisting of the Cauliflower Mosaic Virus (CaMV) 35S promoter, the superpromoter chimeric promoter SPP, the rice actin promoter, the barley HMGW promoter, the PCRU radish cruciferin gene promoter, the corn γ-zein gene promoter, the *Arabidopsis* PGEA1 promoter and the *Arabidopsis* PGEA6 promoter.

32. (currently amended): The method of claim 16, wherein said plant cells or plant explants are transformed with a vector comprising a recombinant DNA comprising both a ~~gene~~ DNA sequence encoding an H_2O_2 producing protein and a gene encoding a protein of interest, and wherein the expression of said gene encoding a protein of interest confers resistance to disease caused by an organism selected from the group consisting of fungi, bacteria, arthropods and nematodes.

Claims 33, 34, and 35 (canceled).

36. (currently amended): The method of claim 16, wherein said plant cells or plant explants are transformed with a vector comprising a recombinant DNA comprising both a ~~gene~~ DNA sequence encoding an H_2O_2 producing protein and a gene encoding a protein of interest, and wherein said gene encoding a protein of interest encodes a protein of agronomic or industrial interest.

37. (currently amended): The method of claim 16, wherein said plant cells or plant explants are transformed with a vector comprising a recombinant DNA comprising both a ~~gene~~ DNA sequence encoding an H_2O_2 producing protein and a gene encoding a protein of interest, and wherein said gene encoding a protein of interest encodes a protein conferring resistance to pathogenic agents.

38. (new): The method according to claim 16, wherein said H_2O_2 producing protein is an oxalate oxidase protein.

39. (new): The method according to claim 16, wherein said H_2O_2 producing protein is wheat germ protein.